

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

REVISED PROJECT APPLICATION FORM

Name of Project: _ReWild Mission Bay_____

Project Applicant: _San Diego Audubon_____

Applicant Contact Person: _Andrew Meyer_____

Applicant Phone Number: _(858) 273-7800 x 101_____

Applicant Email Address: _Meyer@sandiegoaudubon.org_____

REQUIRED INFORMATION

Applications that do not contain a discussion regarding each of the following items will not be considered for inclusion. If the item is included in a detailed supplemental report, please include the report and indicate where the information is located.

ADDITIONAL INFORMATION

Please provide additional information that addresses any of the items on the Application Checklist if it applies to your project. This information will be used for project ranking on the SEP/ECA List. Responses can be provided on separate/additional paper or, if the item is included in a detailed supplemental report, please include the report and indicate where the information is located.

Problem Statement:

ReWild Mission Bay aims to protect and restore up to 240 acres of wetland habitat in northeast Mission Bay and expand opportunities for compatible community access to the marsh. As in much of Southern California, wetlands in Mission Bay have been drastically altered and destroyed over the past 200 years. In Mission Bay, approximately 5 percent of the historic wetlands (i.e., salt marsh, mudflat, salt pan) remain. This system-wide destruction has left much of Mission Bay without the functional benefit of wetlands to provide sediment trapping, nutrient uptake, and habitat/cover for native biota. Anticipated sea-level rise poses a significant threat to the remaining wetlands within the Kendall Frost/Northern Wildlife Reserve, since little transitional habitat is available for migration.

The ReWild Mission Bay planning area is the most promising area in Mission Bay where wetlands and their associated ecosystem processes can be recovered. The planning area includes the bay's remaining wetlands (jointly owned by the City of San Diego and the University of California) and adjacent City-owned parkland currently used for RV camping, mobile homes and other recreation (and which is specifically called out in the Mission Bay Master Plan as available for wetland restoration). Removing fill, lowering the elevation, and restoring vegetation can meaningfully recover wetlands and their processes in this planning area.

In addition to the wetland habitat, the planning area also includes areas that could be restored to native upland habitats, areas for upslope marsh migration as sea levels rise, and public recreation and education opportunities. For a full description of the effort, the site and the project's history, see the Executive Summary and chapter 2 of the ReWild Mission Bay Feasibility Study.

In 2014, the first step of ReWild Mission Bay, a Feasibility Study, was fully funded jointly by the California State Coastal Conservancy and the U.S. Fish and Wildlife Service (referred to as the Mission Bay Wetlands Conceptual Plan). Through an iterative process of public input, robust scientific and regulatory review, and guidance from a steering committee, the project yielded three feasible restoration alternatives in fall, 2018. The second step for ReWild Mission Bay consists of working closely with the City of San Diego to implement the deliverables described below.

Work Plan containing tasks and deliverables compartmentalized into partial funding opportunities, if applicable.

- | Task 1: Project approvals by San Diego City Council and CA Coastal Commission
- | Task 2: Restoration Design
- | Task 3: Environmental Review
- | Task 4: Final Engineering and Design
- | Task 5: Construction
- | Task 6: Post construction monitoring

Timeline (from funding approval) with milestones and end dates.

The following timeline assumes a first funding date of January 1, 2020 to allow for inclusion of end dates. Total time from funding approval is included parenthetically.

- | **Phase 1 Permitting and Design:**
- | January 1, 2020-December 31, 2020: Approval by the San Diego City Council and CA Coastal Commission (end date 12 months from funding approval)
- | January 1, 2021-December 31, 2022: Restoration design and CEQA/NEPA (end date 3 years from funding approval)
- | **Phase 2 Final Design:**
- | January 1, 2023-December 31, 2023: Final engineering and design (end date 12 months from Phase 2 funding approval)
- | **Phase 3 Construction**
- | January 1, 2024-December 31, 2026: Construction (end date 3 years from Phase 3 approval)
- | **Phase 4 Early Monitoring:**
- | January 1, 2027-December 31, 2029: Post restoration monitoring (end date 3 years from Phase 4 funding)
- | **Phase 5 Monitoring:**
- | January 1, 2030-December 31, 2032: Post restoration monitoring (end date 3 years from Phase 5 funding)
- | **Phase 6 Monitoring:**
- | January 1, 2031-December 31, 2033: Post restoration monitoring (end date 3 years from Phase 6 funding)
- | **Phase 7 Monitoring Completion:**
- | January 1, 2034-December 31, 2036: Post restoration monitoring (end date 2 years from Phase 7 funding)

Budget broken down into tasks.

The Feasibility Study was finished in fall 2018, and now it is possible to create an estimated budget for the future tasks of the ReWild Mission Bay effort. The Feasibility Study created three alternatives for wetland restoration in the northeast corner of Mission Bay. The alternatives are called, Wild, Wilder and Wildest, and the costs for the Tasks will vary by which alternative is ultimately chosen. Construction costs are highly dependent on the scope of the restoration alternative chosen, with the amount of earthwork (soil excavation and associated beneficial use/disposal) being the primary driver.

San Diego Audubon Society is working with the City of San Diego to incorporate the Feasibility Study findings into their De Anza Revitalization Plan and 10-Year Mission Bay Park Plan, and at present, a preferred alternative has not been selected. Therefore, estimates for the three alternatives are included below.

- | Tasks 1 and 2: \$1.75 million (in 2017 dollars)
- | Task 3: \$1.25 million (in 2017 dollars)
- | Task 4: \$1.5 million (in 2017 dollars)
- | Task 5: final budget pending alternative selection
 - Wild Alternative: \$91.4 to \$95.8 million (in 2017 dollars)
 - Wilder Alternative: \$46.2 to \$46.4 million (in 2017 dollars)
 - Wildest Alternative: \$62.6 million (in 2017 dollars)
- | Task 6: Estimates available pending alternative selection and final restoration design.

Discuss all permitting requirements, including CEQA, and their status. If exempt, cite applicable statute.

A regulatory framework was developed for the ReWild Mission Bay Feasibility Study. Please see page 374 of the Feasibility Study (accessible here: https://missionbaywetlands.files.wordpress.com/2018/12/rewild-mb_feasibility-study-report_final-december-2018_with-preface-and-es.pdf). Regarding status: no work has been done on environmental review (CEQA & NEPA) or permitting. The Feasibility Study was exempt from CEQA.

Watershed(s) affected. Peñasquitos

Describe if this project can be a basis for additional funding from other sources.

Yes. The City of San Diego's Mission Bay Park Improvement Fund provides funding for large-scale improvements in Mission Bay Park (generated from commercial lease holds within the bay). As of 2015, the fund identified \$16 million available for wetlands restoration, which can be secured as match for potential future SEP funding. Additionally, several state and federal agencies have expressed interest in funding this project (e.g., CA State Wildlife Conservation Board, U.S. Fish and Wildlife Service, US Army Corps of Engineers, SANDAG) and the SEP funds would provide important matching funds for future grant opportunities.

Monitoring, success criteria, and other tools to track long-term success.

The development of a long-term adaptive management and monitoring program will be included in the development of restoration designs and would evaluate the success of the project based on the restoration goals set forth in the Feasibility Study. The monitoring protocol will be based upon best practices (including those identified in the San Diego Water Board's Practical Vision Chapter 2).

Description of how the project is resilient to climate change.

The planning area is located in an area that is vulnerable to future sea level rise. In 2015, the California Coastal Commission released Sea Level Rise Policy Guidance based on projections by the National Research Council in 2012. The sea level rise projections are up to 2 feet by 2050 and up to 5.5 feet by 2100. The immediately adjacent urban development already experiences periodic flooding (particularly during king tides). Existing development within the planning area, if allowed to remain, would require significant armoring in the face of rising sea levels. The Feasibility Study considers a range of sea level rise scenarios for the years 2050 and 2100 in order to assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea level rise. The restoration of wetlands in the planning area would provide wetland species with upland migration areas and could also reduce flooding impacts on surrounding infrastructure by buffering waves and tides. Expanding habitat would provide resilience to changes in freshwater pulse frequency associated with altered storm regimes resulting from climate change. Finally, healthy cord grass/eelgrass habitats have been associated with a reduction in local impacts of ocean

acidification.

Applicant's ability/authority to receive and distribute funds.

Founded in 1948, the San Diego Audubon Society (a 501(c)(3) non-profit organization) has served the San Diego region for over 70 years. Its mission is to foster the protection and appreciation of birds, other wildlife, and their habitats, through education and study, and advocate for a cleaner, healthier environment. San Diego Audubon has been restoring sensitive dune and salt marsh habitats and maintaining California least tern nesting sites in Mission Bay for more than 20 years. It has a skilled team of staff dedicated to the ReWild Mission Bay effort, and a working Board made up of highly respected and influential scientists and community members. This fiscal year, the grantee will manage approximately \$860,000 in grants and other funding.

Is the project to conduct work that is required by any entity/agency? (e.g. cleanup or mitigation)

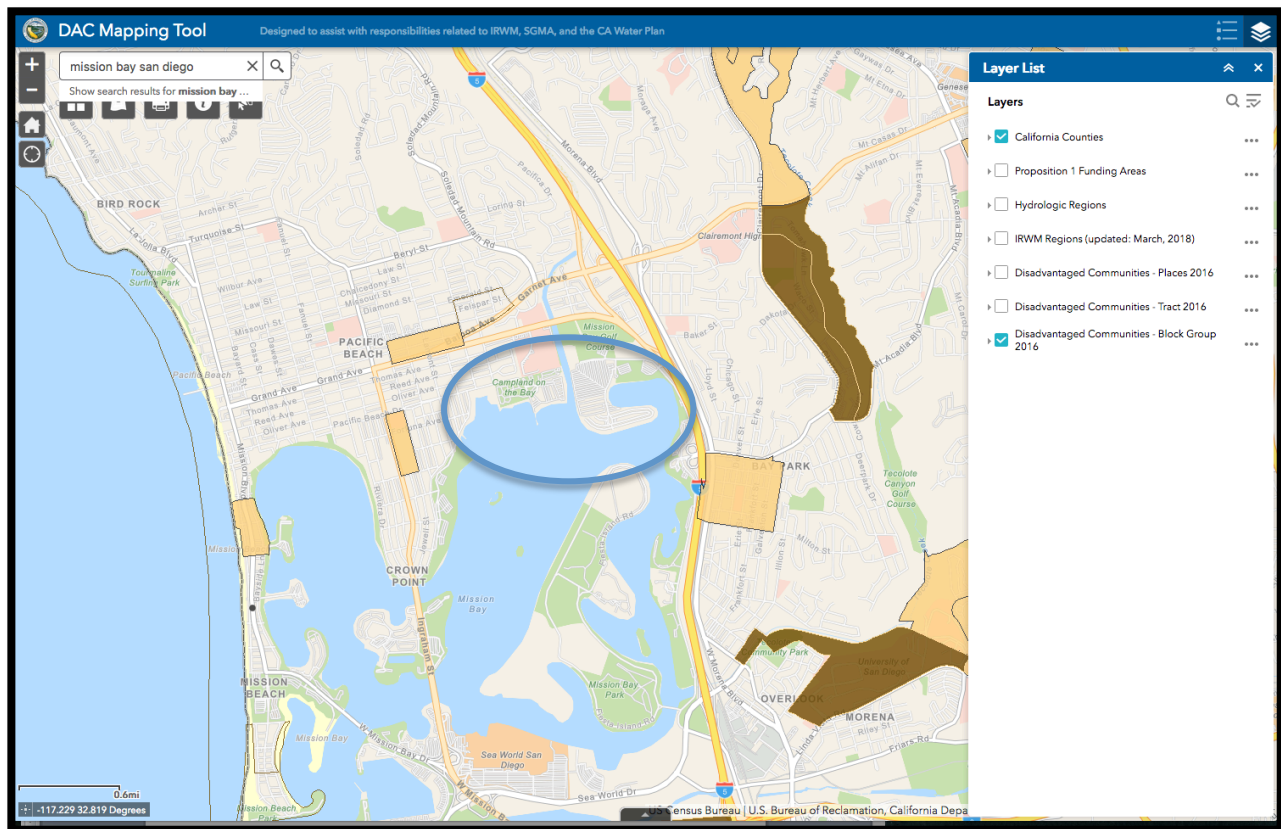
No.

I. Eligibility Requirements

Projects must address at least one of the following priorities to qualify for further evaluation and inclusion in the SEP/ECA List. To the extent that they apply to your project, please make sure to describe these in your proposal.

1. Does the project address an *environmental justice (EJ)* issue or benefit a *disadvantaged community (DAC)*?

Yes. According to the California Department of Water Resources (DWR), there are four disadvantaged communities and two severely disadvantaged community within a one mile radius based on the DAC Mapping Tool Census Tract dataset The DWR data is based on Proposition 84 Integrated Regional Water Management guidelines (2016) using data from the U.S. Census. (See map below, with the general ReWild planning area indicated by the blue circle. A complete planning area map is included with submittal.) Mission Bay Park is a City of San Diego Regional Park, and receives 15 million visitors annually, from neighborhoods all over the City of San Diego, the state and the world.



Map generated by <https://gis.water.ca.gov/app/dacs/>

2. Does the project address *DAC water related infrastructure needs*?

No.

3. Does the project promote *preservation or restoration of aquatic ecosystems in the San Diego Region*?

Yes. This project aims to protect and restore up to 240 acres of coastal wetland

habitat in Mission Bay, San Diego. Coastal salt marsh is the primary aquatic ecosystem

identified for restoration, and significant portions of the project area would also include restoration of eelgrass, mudflat, transitional, and upland habitats as well.

Additionally, this project was added to the Southern California Wetlands Recovery Project Work Plan in 2013 and was identified as one of three priority regional wetlands restoration projects by the San Diego Regional Water Quality Control Board Resolution No. R9-2015-0041 (Resolution to support restoration of aquatic ecosystems in the San Diego region; June 24, 2015)

4. Does the project implement or further [recovery of streams, wetlands, and riparian systems](#)?

Yes, this project specifically addresses the recovery of wetland systems. The existing Kendall Frost Mission Bay Marsh Reserve/Northern Wildlife Preserve includes approximately 40 acres of wetland habitat in the northeast corner of Mission Bay. The existing marsh is highly impacted by adjacent urban development through runoff, presence of urban predators, limited freshwater/sediment inputs, and minimal available space for upland-wetland migration in the face of sea level rise. By expanding the existing marsh via restoration of immediately adjacent City-owned properties, this project implements the recovery of Mission Bay's wetland systems.

Through the years, Mission Bay has experienced significant type conversion from a salt marsh estuary to an embayment dominated by open water and subtidal habitats (including eelgrass) as a result of anthropogenic modifications to the physical characteristics of the bay (mostly via dredging). Hydrologic changes (via re-routing of the San Diego River and channelization of Rose Creek) are also significant and have changed patterns of chemical characteristics (particularly with respect to salinity, nutrients, contaminants, and dissolved oxygen).

5. Does the project implement or further the monitoring and assessment framework in the San Diego Water Board's [Practical Vision Chapter 2](#)?

Development and implementation of a long term adaptive management and monitoring program for the restored wetlands is a key task within the overall goal of ReWild Mission Bay. Once developed, this plan will further the monitoring and assessment framework included in the San Diego Water Board's Practical Vision.

6. Does the project implement or further a strategy for achieving a [sustainable local water supply](#)?

No.

II. Project Attributes

Eligible projects will also be evaluated based on the following attributes. To the extent that they apply to your project, please make sure to describe these in your proposal.

1. *Does the project directly contribute to improvements of water quality objectives and/or beneficial uses?*

Yes. The tidal wetlands of Southern California are part of a large mosaic that functions as an interconnected system. The restoration of Mission Bay's wetlands will not only provide improvements in water quality, but also an expanded migratory bird stopover area, a source for seed and larvae, and habitat for State and Federal threatened and endangered species. These wetlands will contribute to water quality improvements in Mission Bay both by acting as a filter through which freshwater and sediment from Rose Creek must first pass before reaching the bay, and also as the marsh is inundated with bay water at high tides.

2. *Does the project propose measurable environmental outcomes?*

The ReWild Mission Bay Feasibility Study project team (including a Science and Technical Advisory Committee) worked with the community to finalize three main project goals that inform the development and selection of the final three conceptual plans:

- | Restore, enhance and/or create estuarine habitats (intertidal mudflat, salt marsh, tidal channels, & marsh/upland ecotone) to provide ecosystem functions and services, such as water quality improvement, shoreline stabilization, carbon sequestration, resistance and resilience to climate change and associated effects, and fish & wildlife support.
- | Protect the existing and restored estuarine habitat and associated wildlife from detrimental anthropogenic impacts (direct and indirect) associated with surrounding development.
- | Provide new and/or improve opportunities for public access, education, research, and recreation in ways that improve understanding and stewardship while protecting the existing and restored estuarine habitats and associated wildlife.

As the information contained in the Feasibility Study moves forward in the development process and a final plan is chosen for the area, SMART restoration objectives will be developed (specific, measurable, achievable, realistic, and time-bound) that focus on conservation and environmental outcomes.

3. *Does the project demonstrate sustained longevity of environmental outcomes (e.g., conservation, maintenance endowments, easements, monitoring)?*

Yes. The two landowners of this project, the City of San Diego and the University of California, have both made specific, approved, consistent, long-term investments in the project area. The University of California manages the existing reserve through the University of California Natural Reserve System and the City-owned parcels are funded jointly by the City of San Diego's General Fund and Mission Bay Park Improvement Fund. Several community non-profits (including San Diego Audubon) have also made considerable investments of staff time and effort into this project. Jointly, these groups will

ensure the sustained longevity of this project in terms of maintenance and monitoring (although this may also be funded through whatever means are developed to fund the restoration itself).

4. *Is the project part of a larger vetted, adopted, or established plan with support from multiple and diverse partners?*

Yes. The legislative acts from the early-mid 20th century that granted title of Mission Bay Park tidelands from the California State Lands Commission in trust to the City of San Diego calls for Mission Bay to be developed in accordance with specific Public Trust uses (which includes the preservation of lands in their natural state and restoration activities to support that). Specifically, the restoration of wetlands in northeast Mission Bay is called for in the 1994 update to the City of San Diego's Mission Bay Park Master Plan, which was approved by the CA Coastal Commission in 1995 (though is not a certified segment of the City's LCP and therefore remains under the jurisdiction of the Commission), and the existing Mission Bay Natural Resources Management Plan. This particular restoration project is included in the Southern California Wetlands Recovery Project's Work Plan, which is a mutually vetted list of priority restoration projects in Southern California approved by the WRP's 18 partner agencies. Most recently (2014), this effort was included as one of three priority projects in a resolution from the San Diego Regional Water Quality Control Board in their effort to support wetlands restoration in the region.

5. *Does the project improve conditions for a 303(d) limited segment or preserve conditions in a high quality water body?*

Yes. This project improves conditions for 303(d) limited segments, including at the mouth of Rose Creek, along Mission Bay shorelines (including Campland and De Anza), and in open water of Mission Bay. The Clean Water Act Section 303(d) listed pollutants in Rose Creek include selenium and toxicity. Rose Creek is impaired for benthic community effects, as well. Beneficial uses of Rose Creek are affected by the pollutants found within the waterbody. Designated beneficial uses of the inland surface waters of Rose Creek consist of contact and non-contact recreation, warm freshwater habitat, and wildlife habitat. The extent of impairment includes 13 miles of Rose Creek for selenium and toxicity. The mouth of Rose Creek, at Mission Bay, is also listed for eutrophication and lead for an impacted area of 9.2 acres. Rose Creek is impaired for warm freshwater habitat use due to selenium and toxicity. Additionally, the mouth of Rose Creek is impaired for marine habitat use due to lead and potential eutrophic conditions.

Both Campland and De Anza Cove shorelines are Section 303(d) listed for enterococcus, fecal coliform, and total coliform. These pollutants affect the beneficial uses of the Campland and De Anza Cove shorelines. The extent of impacted shoreline areas for indicator bacteria pollutants in Campland and De Anza Cove are 0.08 miles and 0.06 miles, respectively. Both the shorelines are impaired for water contact recreation use and shellfish harvesting use due to indicator bacteria.

Sources:

1. AMEC 2015. Mission Bay Watershed Management Area Water Quality Improvement Plan. Prepared by AMEC Foster Wheeler Environment &

Infrastructure, Inc. (AMEC). Submitted to the San Diego Regional Water Quality Control Board by the County of San Diego and Caltrans. June 2015.

2. SWRCB 2018. Final 2014/2016 California Integrated Report (Clean Water Act Section 303(d) List/ 305(b) Report), Staff Report, Appendix A: Category 5 List (2012 California 303(d) List Of Water Quality Limited Segments). Prepared by State Water Resources Control Board (SWRCB). January 2019.

6. *Does the project improve a designated priority listed in a **Water Quality Improvement Plan**?*

No. To the best of our knowledge, restoration of wetlands in Mission Bay was not designated as a priority in the Mission Bay Watershed WQIP (despite suggestions from stakeholders).

7. *Does the project improve conditions of a **key beneficial use category in a key area**?*

Yes. Mission Bay is identified as a key area for the following key beneficial uses, which are to be improved by completion of this project: fish and shellfish consumption (second rank), recreation-1 (second rank), recreation-2 (first rank), and habitats & ecosystems (second rank).

8. *Does the project address the source of the problem at/near the source of the problem?*

Yes. A main source for this problem is the destruction of wetlands by local, state, and federal agencies in the mid 20th century. By restoring wetlands, this project will repair the loss of the ecosystem services the wetlands once provided. This project does not address the source of problems related to pollution, global climate change, or overfishing but may help to ameliorate their effects.

9. *Does the project address problems to sensitive/vulnerable/rare places/waters/uses?*

Yes. Coastal wetlands are sensitive, vulnerable, and rare places in the state of California, owing in large part to their broadscale destruction in the previous century. This project aims to protect one of the rare remaining wetlands and expand it to lessen its vulnerability to stressors. By doing so, sensitive/vulnerable/rare use (access to a natural coastline) will also be addressed.

10. *Can the project be used for leverage for other funding/actions/benefits?*

Yes. SEP funds would be eligible to use as matching funds for future grant applications to the state and federal agencies that have already expressed interest in funding portions of this project.

11. *Does the project provide a cost-effective means of attaining water quality goals?*

While there may be more cost effective ways to address *only* the immediate water quality goals of this project through the construction of a water treatment facility at the mouth of Rose Creek, such a facility would require long-term maintenance beyond what a well-functioning wetland system would require. Such a facility would also not provide the other benefits (wildlife, recreational, ecosystem functions, etc.) that a restored wetland will. The Feasibility Study provides a breakdown of the cost-effectiveness of the three alternatives. See Table 8.6 on page 233 of the Feasibility Study (accessible here: https://missionbaywetlands.files.wordpress.com/2018/12/rewild-mb_feasibility-study-report_final-december-2018_with-preface-and-es.pdf).

12. Does the project integrate outreach and education to targeted audiences?

Yes. Built into the vision of ReWild Mission Bay is an effort to expand opportunities for compatible community access. This vision was codified in the official goals of ReWild Mission Bay to provide new and/or improve opportunities for public access, education, research, and recreation. These issues are addressed in the Feasibility Study in chapters 2, 3, and 6, including a focus on nearby schools and the Native American community, as well as under-served communities and other groups not traditionally engaged with habitat restoration. Researchers from local universities are another critical group included as stakeholders.

ReWild Mission Bay Feasibility Study Summary



ReWild Mission Bay

Wetlands Restoration
Feasibility Study

A wetland complex lost to massive alteration

In the late 1800s, Mission Bay was a 4,000-acre mosaic of wetland habitats sprawled across the mouth of the San Diego River, forming “Bahia Falsa” or “False Bay”. For millennia, this wetland complex supported Native American communities who relied on the Bay’s natural resources. Tens of thousands of migratory waterfowl and shorebirds thrived in the Bay’s eelgrass beds, mudflats, and salt marshes as they travelled along the Pacific Flyway, a north-south highway of bird migration. Over many centuries, multitudes of fish emerged from the Bay’s wetland “fish nurseries”, contributing to abundant fisheries along the southern California coast.

In the 1940s and 1950s, Mission Bay was radically altered through dredging and island construction to create recreational opportunities for San Diego. In the process, nearly all of Mission Bay’s wetland resources were destroyed.¹

¹ For a more complete description of the Bay’s historical ecology, see the San Francisco Estuary Institute’s “Mission Bay Historical Ecology Reconnaissance Study, Data Collection Summary, February 2016” found as an appendix to the full report and accessible at rewildmissionbay.org.



1857 Historical Survey Map of San Diego Bay and Mission (False) Bay
Photo: NOAA Office of Coast Survey Historical Map & Chart Collection

Of the 4,000-acres of wetland complex that once existed, merely one percent—40 acres—remain.



ReWild Mission Bay study area (in black dotted line) and Restoration Focus Areas (in red)

ReWild Mission Bay represents the first time in decades that the community has a chance to help determine how these public lands are used—lands that belong to all of us.

Today we know better

We know how important wetlands are to our communities, our coast, and our wildlife. We know that they improve water quality, protect our coastline in the face of sea level rise, and provide habitat for wildlife like Brown Pelican and California Halibut.

ReWild Mission Bay’s vision is to enhance and restore estuarine habitats in the northeast corner of Mission Bay at the mouth of Rose Creek, contiguous with the Kendall-Frost Marsh Reserve/Northern Wildlife Preserve, and expand opportunities for compatible community access to the marsh.

The master plan for Mission Bay Park has for decades called for restoring wetland habitat, and the ReWild Mission Bay study identifies feasible wetland restoration alternatives. This study area encompasses about 460 acres in Mission Bay’s northeast corner, and includes open water, developed parkland, lower Rose Creek, and the largest remnant of wetland habitat left in all of Mission Bay. The Feasibility Study contains three alternatives for wetland restoration, along with analysis of how well they would perform through time as sea levels rise, how much they would cost, and much more. These results are summarized on the following pages.

A vision for restoring wetlands to benefit nature and people

ReWild Mission Bay will:

- Give back shoreline access to the public
- Draw people and dollars into the community and region through recreation and ecotourism
- Provide numerous new options for education and research
- Restore critical fish and bird habitat that has been lost from Mission Bay in the last 100 years
- Sequester carbon in expanded marsh habitats
- Improve water quality in the northeast corner and throughout Mission Bay
- Protect communities from the impacts of sea level rise
- Provide nursery habitat for commercially important fish species, like halibut

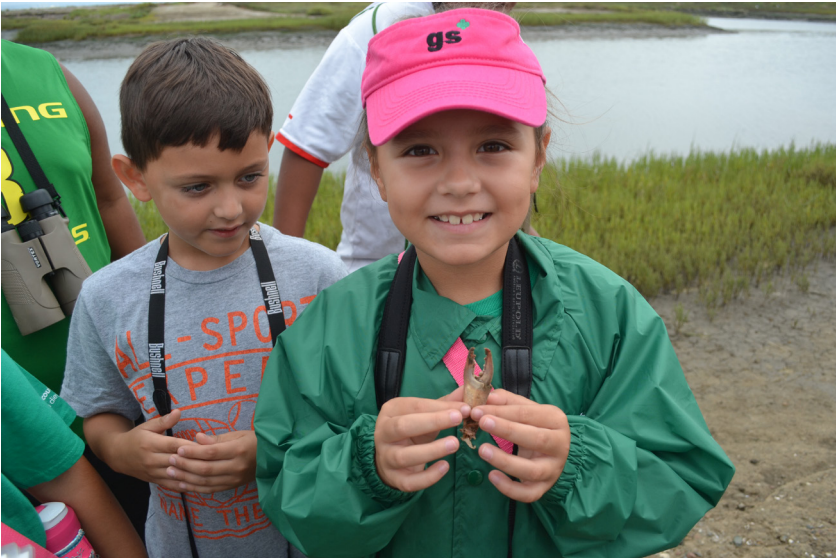


Brown Pelican. Photo: James L. Robellard/Audubon Photography awards

The “Wild” Alternative

The “Wild” alternative explores opportunities to restore wetlands exclusively within the existing landforms immediately east and west of Rose Creek, and does not propose shallowing adjacent open water or any major modifications to the existing shoreline. This could minimize issues related to the permitting of placing fill in open water. However, this alternative achieves the lowest amount of restored habitat and lowering of elevations in the areas east and west of Rose Creek will necessitate exporting a large volume of soil off-site, resulting in significant impacts to traffic, air quality, and greenhouse gas emissions.

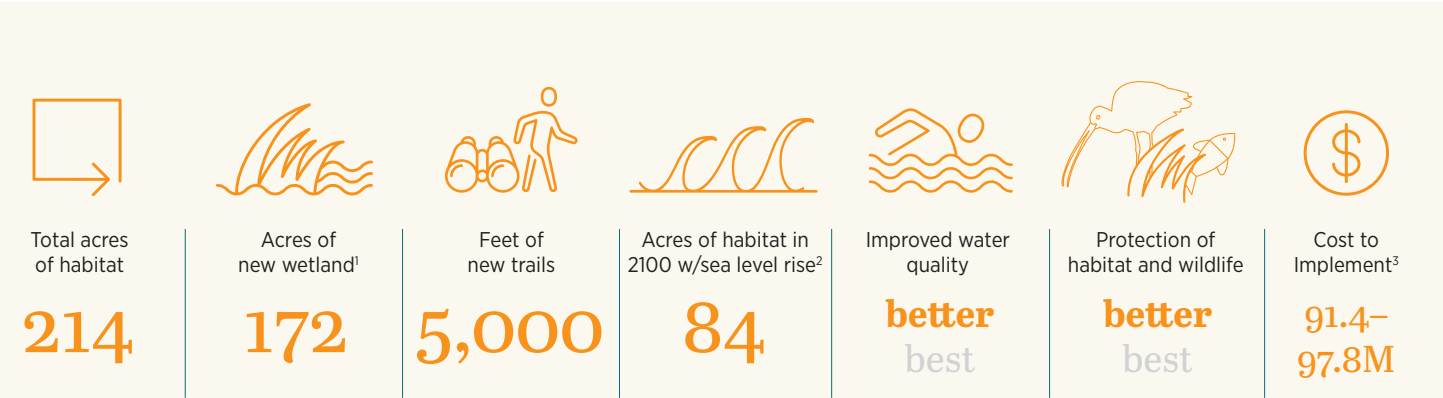
All ReWild restoration alternatives include public access, including a visitor center, overlooks, multiple boat launches, and interpretive trail systems connected to existing parkland, walkways, and bikeway infrastructure where feasible.



Scout Troop. Photo: Eliana Herrera Rodriguez

























California Least Tern. Photo: Peter Brannon/Audubon Photography Awards



¹Including salt marsh, transitional, and upland habitats; ²The Study uses 5.5 feet of sea level rise in the year 2100; ³Millions of 2017 dollars

Legend

	Habitat Type	Public Access & Recreation	
 Study Area	 Upland	 Passive and Active Recreation with Appropriate Buffer	 Proposed "Fence Walk"
 Restoration Focus Area	 Transitional	 Existing Bike and Pedestrian Path	 Boat Launch/Storage Optional Location
 Proposed Channel	 Mid-High Salt Marsh	 Existing Pedestrian Path	 Visitor Center Optional Location
 Existing Channel	 Low Salt Marsh	 Proposed Bike and Pedestrian Path	 Visitor Parking Optional Location
	 Mudflats	 Proposed Pedestrian Path	 Interpretive Landform or Structure
	 Subtidal	 Proposed Interpretive Path	 Estuarine Science Center



“Wild” Alternative (Habitat Distribution at Time of Construction)

The “Wilder” Alternative

The “Wilder” alternative responds to a request from the City of San Diego to accommodate 40 acres of guest housing on De Anza Point. “Wilder” uses soil excavated from east and west of Rose Creek to shallow approximately 38 acres of open water and in doing so creates mudflats and salt marsh in areas beyond existing landforms. This option provides resiliency to sea level rise comparable to the “Wild” alternative, but reduces the need to export soil off-site, bringing down costs by almost 50% as well as reducing impacts to traffic, air quality, and greenhouse gas emissions.

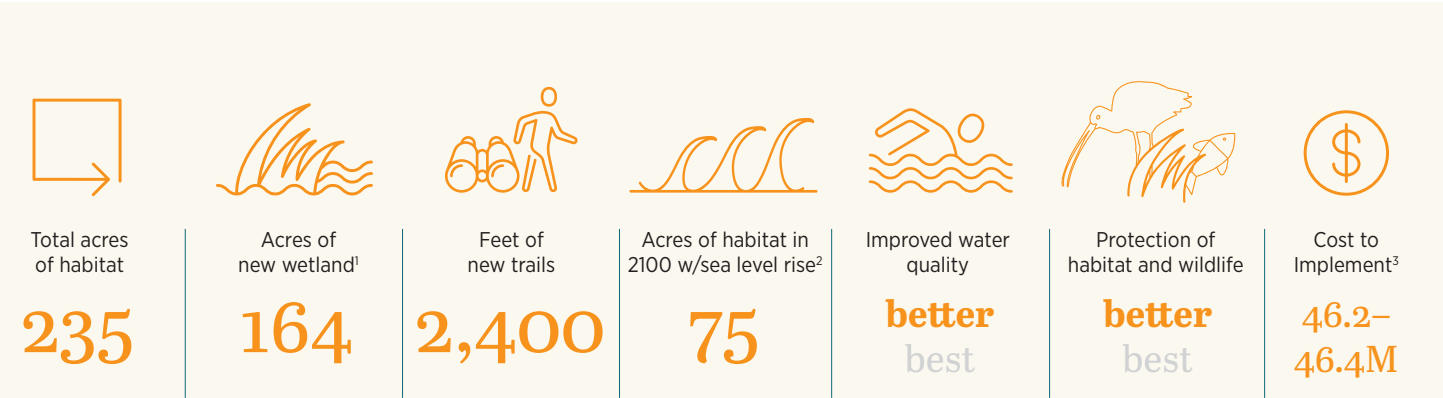
All ReWild restoration alternatives include public access, including a visitor center, overlooks, multiple boat launches, and interpretive trail systems connected to existing parkland, walkways, and bikeway infrastructure where feasible.



Light-footed Ridgway's Rail. Photo: Rick Lewis/Audubon Photography Awards



Photo: Lisa Cox, US Fish and Wildlife Service



¹Including salt marsh, transitional, and upland habitats; ²The Study uses 5.5 feet of sea level rise in the year 2100; ³Millions of 2017 dollars

Legend

	Habitat Type	Public Access & Recreation
Study Area	Upland	Passive and Active Recreation with Appropriate Buffer
Restoration Focus Area	Transitional	Existing Bike and Pedestrian Path
Proposed Channel	Mid-High Salt Marsh	Existing Pedestrian Path
Existing Channel	Low Salt Marsh	Proposed Bike and Pedestrian Path
	Mudflats	Proposed Pedestrian Path
	Subtidal	Proposed Interpretive Path
		Proposed “Fence Walk”
		Boat Launch/Storage Optional Location
		Visitor Center Optional Location
		Visitor Parking Optional Location
		Interpretive Landform or Structure
		Estuarine Science Center



“Wilder” Alternative (Habitat Distribution at Time of Construction)

The “Wildest” Alternative

The “Wildest” alternative expresses a vision that optimizes water quality, sea level rise adaptation, and the ability for wetland habitats to persist over time. The “Wildest” alternative proposes using soil from both east and west of Rose Creek to restore 94 acres of open water to mudflats and salt marshes. This alternative provides the greatest resiliency to sea level rise of all alternatives. This design also represents a balanced cut and fill option, virtually eliminating the need to export soil off-site and reducing impacts to traffic, air quality, and greenhouse gas emissions. This also ensures that more restoration dollars are spent on creating habitat and public access features, rather than spending money on offsite disposal.

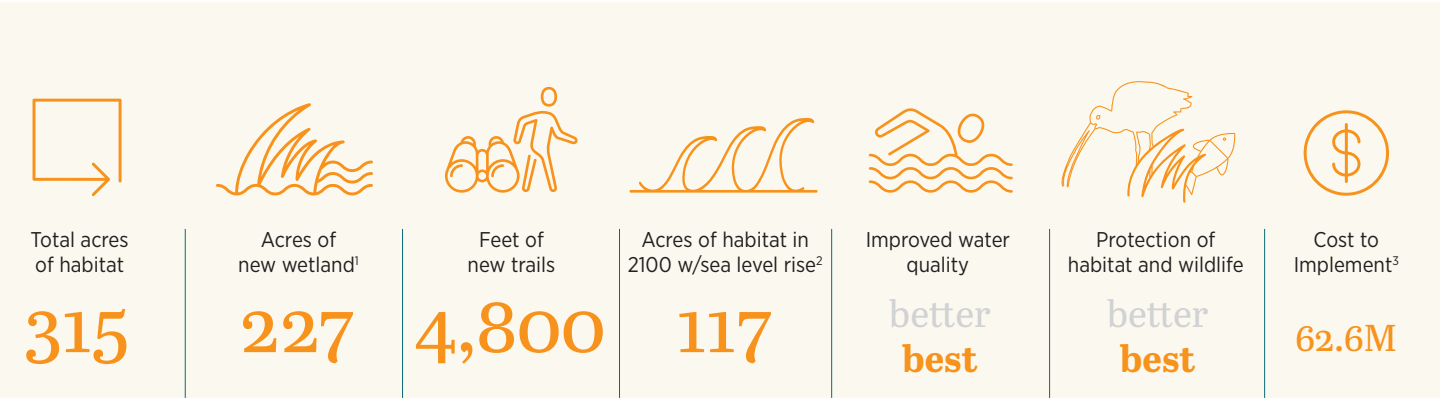
All ReWild restoration alternatives include public access, including a visitor center, overlooks, multiple boat launches, and interpretive trail systems connected to existing parkland, walkways, and bikeway infrastructure where feasible.



Photo: Lisa Cox, US Fish and Wildlife Service



Bufflehead. Photo: Pam Polcyn/Audubon Photography Awards



¹Including salt marsh, transitional, and upland habitats; ²The Study uses 5.5 feet of sea level rise in the year 2100; ³Millions of 2017 dollars

Legend

	Habitat Type	Public Access & Recreation
Study Area	Upland	Passive and Active Recreation with Appropriate Buffer
Restoration Focus Area	Transitional	Existing Bike and Pedestrian Path
Proposed Channel	Mid-High Salt Marsh	Existing Pedestrian Path
Existing Channel	Low Salt Marsh	Proposed Bike and Pedestrian Path
	Mudflats	Proposed Pedestrian Path
	Subtidal	Proposed Interpretive Path
		Proposed "Fence Walk"
		Boat Launch/Storage Optional Location
		Visitor Center Optional Location
		Visitor Parking Optional Location
		Interpretive Landform or Structure
		Estuarine Science Center



“Wildest” Alternative (Habitat Distribution at Time of Construction)

Sea level rise

These maps show the distributions of habitats at the time of construction (assumed here as the year 2020) and with five and a half feet of sea level rise (assumed here as the year 2100). Due to inundation from rising sea levels, the area of each habitat type changes over time. These maps also show that all wetlands in Mission Bay will be lost to sea level rise without significant and timely habitat restoration here. That loss would hurt water quality, reduce public access, and jeopardize the survival of endangered species.



"Wild" Alternative - 2020 Habitat Distribution



"Wild" Alternative - 2100 Habitat Distribution



"Wilder" Alternative - 2020 Habitat Distribution



"Wilder" Alternative - 2100 Habitat Distribution



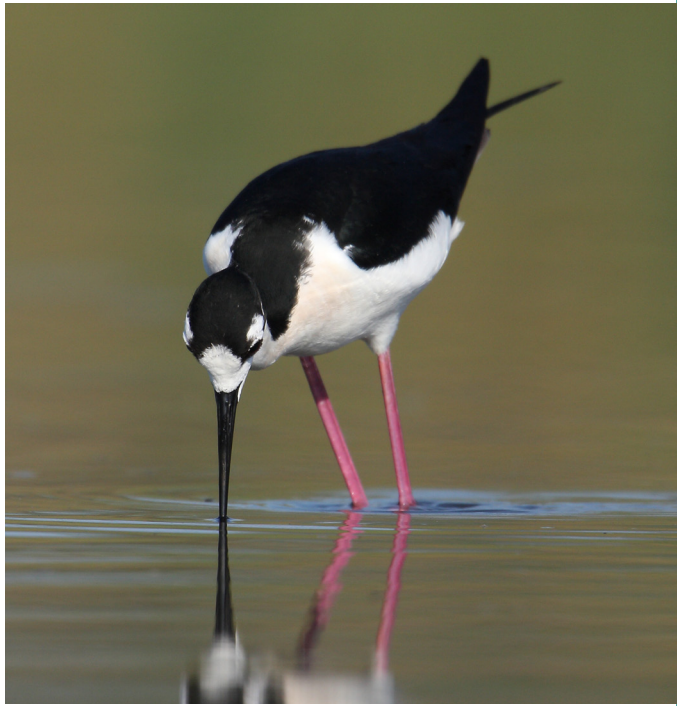
"Wildest" Alternative - 2020 Habitat Distribution



"Wildest" Alternative - 2100 Habitat Distribution



Northern Harrier. Photo: Steven Sachs/Audubon Photography Awards



Black-necked Stilt. Photo: Anthony Louviere/Audubon Photography Awards

We can do this

Regarding the fundamental question of whether it is feasible to restore wetlands and associated habitats in the northeast corner of Mission Bay, **this study provides an unequivocal answer: yes.**

There are several existing natural resources working in favor of healthy expanded wetlands. The close proximity of the study site to existing remnant coastal wetlands at Kendall-Frost Marsh Reserve and the Northern Wildlife Preserve provides confidence that restoring adjacent areas would be successful. Additionally, opportunities to reconnect Rose Creek to existing and newly restored wetlands would provide much needed fresh water and sediment to nourish the habitats and maintain marsh elevations. Finally, hydrodynamic modeling results indicate that restoration alternatives do not increase flooding risk in the area, and in fact slow tidal and flood velocities in the project area and decrease tidal velocities at the mouth of Rose Creek.

Now, we call on politicians and community leaders to make the scientifically sound and forward thinking decisions required to restore these valuable wetlands.

Our process

ReWild Mission Bay is a collaborative effort of San Diego Audubon and our partners to protect and restore crucial wetlands in San Diego's Mission Bay for the benefit of wildlife and our communities. An important step of that effort is this Feasibility Study, funded by the California State Coastal Conservancy and US Fish and Wildlife Service, which developed and analyzed a range of wetlands restoration alternatives for the northeastern corner of Mission Bay via a transparent, public process.

Four years of stakeholder outreach and public engagement informed these three final conceptual plans, or “restoration alternatives”, that show feasible, implementable plans for restoration. This outreach included five public workshops held at Mission Bay High School from the spring of 2016 to the autumn of 2018. The workshops were well attended, with an average of more than 90 community members at each. People provided written feedback at the meetings and online through a comprehensive project website.

These alternatives and their analysis were developed by engineers and biologists lead by Everest International Consultants and in coordination with a Science and Technical Advisory Committee consisting of subject matter experts, staff from the City of San Diego, and representatives from wildlife and regulatory agencies. Robust public involvement coupled with close coordination with governmental and scientific advisors ensured that the results of this Study provide a vision for site-specific restoration alternatives that are capable of garnering agency approval and implementation funding.

Project team

San Diego Audubon Society led the ReWild Mission Bay Feasibility Study. The project's technical team, led by Everest International Consultants, included Nordby Biological Consulting, New Land West Company, and AECOM. A steering committee known as the Wetlands Working Group helped oversee and direct the project. This group included staff from the two primary funding agencies, UC Natural Reserve System staff, representation from Friends of Mission Bay Marshes, and San Diego Audubon board and staff members.

We thank these participants, the Science and Technical Advisory Committee, and the hundreds of community members who attended our public workshops for engaging in this planning effort and inspiring what is contained in the final restoration alternatives.



American Avocet. Photo: Jesse Hodges/Audubon Photography Awards



The complete ReWild Mission Bay Feasibility Study can be found at

rewildmissionbay.org



Hyperlink to ReWild Mission Bay Feasibility Study:

https://missionbaywetlands.files.wordpress.com/2018/12/rewild-mb_feasibility-study-report_final-december-2018_with-preface-and-es.pdf

Coastal Conservancy Staff Recommendation, Maps, Photos, and Letters of Support

COASTAL CONSERVANCY

Staff Recommendation

May 29, 2014

MISSION BAY WETLANDS CONCEPTUAL PLAN

Project No. 14-012

Project Manager: Megan Cooper

RECOMMENDED ACTION: Authorization to disburse up to \$460,000 to the San Diego Audubon Society to develop a conceptual plan for the Mission Bay wetlands.

LOCATION: Mission Bay, City of San Diego

PROGRAM CATEGORY: Resource Enhancement

EXHIBITS

Exhibit 1: Project Location and Site Maps

Exhibit 2: Site Photos

Exhibit 3: City of San Diego Plans to Restore Wetland Habitat in
Proposed Planning Area

Exhibit 4: Letters of Support

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31251 - 31270 and 31111 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of up to four hundred sixty thousand dollars (\$460,000) of Conservancy funds to the San Diego Audubon Society to be used for developing a conceptual plan for the Mission Bay wetlands. Prior to the disbursement of funds, the San Diego Audubon Society shall submit for the review and written approval of the Conservancy’s Executive Officer a work program, including budget and schedule, and any contractors to be employed for these tasks.”

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed authorization is consistent with Chapter 6 of Division 21 of the Public Resources Code, regarding enhancement of coastal resources, and with Section 31111 of the

Public Resources Code, regarding grants to nonprofit organizations to undertake plans and feasibility studies.

2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
 3. The San Diego Audubon Society is a nonprofit organization existing under section 501(c)(3) of the Internal Revenue Service, and whose purposes are consistent with Division 21 of the Public Resources Code.”
-

PROJECT SUMMARY:

Staff recommends that the Conservancy authorize the disbursement of up to four hundred sixty thousand dollars (\$460,000) of Conservancy funds to the San Diego Audubon Society (SDAS) to be used for developing a conceptual plan (the “Plan”) for the Mission Bay wetlands. This Plan will develop approaches to protect and enhance 40 acres of existing tidal wetland habitat and for the restoration of approximately 130 acres of wetland and upland habitat on a site that was once wetland, but was filled to create an RV campground. Enhanced public access for research, education, and passive recreation will be another significant focus of the planning effort.

As in much of Southern California, wetlands in Mission Bay have been drastically altered and destroyed over the past 200 years (see Exhibit 1, Figure 3). Approximately 5 percent of the historic wetlands (i.e., salt marsh, mudflat, salt pan) in Mission Bay remain today. This system-wide destruction has left much of Mission Bay without the functional benefit of wetlands to provide sediment trapping, nutrient uptake, and habitat/cover for native biota. Anticipated sea-level rise poses a significant threat to the remaining wetlands, since little transitional habitat is available for migration. The planning area is the most likely area in Mission Bay where wetlands and their associated ecosystem processes can be recovered. In addition to the wetland habitat, the planning area also includes areas that could be restored to native upland habitats, areas for upslope marsh migration as sea levels rise, and public recreation and education opportunities (see Exhibit 2).

The Kendall-Frost marsh is the last remaining salt marsh habitat in Mission Bay. When the adjacent wetlands were filled with dirt and soil in 1967 to build Campland on the Bay (“Campland”), Kendall-Frost was cut-off from Rose Creek, its historic source of marsh-sustaining freshwater, sediment and nutrients. As a small, fragmented habitat, Kendall-Frost is suffering the negative ongoing results of edge effects, although it still supports one of the few remaining habitat sites in California for the federally-listed endangered Light-footed Clapper Rail and state-listed Belding’s Savannah Sparrow.

It has been the City of San Diego’s policy to explore the restoration of salt marsh habitat in the area adjacent to Kendall-Frost for 36 years, starting with the Mission Bay Park Master Plan (1978). However, the City of San Diego (“the City”) has not initiated a public planning process with this focus, likely because of funding and staffing shortfalls, and conflicting priorities. Localized factors make the timing of the proposed planning effort particularly auspicious. Properties within this site are designated State tidelands within the coastal zone, which limits private uses to leases granted by the City. A key lease at Campland on the Bay (“Campland”)

will expire in 2017 and the City will need to decide soon what to do with these State tidelands. Another lease on State tidelands expired in 2003 at De Anza Point (aka Mission Bay RV Resort). This Plan will provide the City and the surrounding communities with a vision of the ecological restoration and public access that could be possible on the Campland property, as an alternative to a lease renewal for the RV Park, and possibly on portions of the De Anza Point property. And although the City hasn't initiated this planning process, most of the areas for the proposed Plan are City-designated restoration areas or "special study" areas (see "Site Description" below). Furthermore, the recently elected Mayor of San Diego listed the expansion of Mission Bay's wetlands as one of his top priorities (see Required Criteria #3).

The specific tasks for this funding authorization include developing a working group and a technical advisory group, identifying existing and historical conditions, preparing goals and objectives, identifying opportunities and constraints, developing a range of restoration alternatives, and conducting stakeholder outreach. Community outreach and engagement will be a major part of this planning process because the involvement of the neighboring communities will be critical to the success of the Plan. The wetland working group and/or technical advisory group will consist of representatives from relevant departments within the City, the operator of Campland, community groups representing neighbors and other interested parties, resource and regulatory agencies, academics and other technical experts. The final product will be a written Plan with at least three feasible conceptual restoration alternatives that will be appropriate and sufficiently robust for environmental analysis (CEQA/NEPA) as part of a subsequent phase.

Founded in 1948, the San Diego Audubon Society (the grantee) has served the San Diego region for over 60 years. Its mission is to foster the protection and appreciation of birds, other wildlife, and their habitats, through education and study, and advocate for a cleaner, healthier environment. The grantee has been restoring sensitive dune and salt marsh habitats, and maintaining California least tern nesting sites in Mission Bay for over 20 years. It has a skilled team of staff dedicated to the proposed planning effort, and a working Board made up of highly respected and influential scientists and community members. This fiscal year, the grantee will host approximately 25 habitat maintenance/restoration volunteer events and will manage approximately \$400,000 in grants and other funding.

Site Description: The planning area encompasses approximately 270 acres in the northeast corner of Mission Bay, San Diego surrounding the mouth of Rose Creek (see Exhibit 1). There is approximately 170 acres of existing or potential habitat within this planning area. The habitat areas include the 40-acre Kendall-Frost Marsh Reserve ("Kendall-Frost"), which includes the City's 24-acre Northern Wildlife Preserve and UCSD's 16-acre Kendall-Frost Marsh. Adjacent to Kendall-Frost is the 3-acre Frost parcel, which is an upland area with limited habitat function owned by the City of San Diego. The entire Kendall-Frost area is operated by UCSD as a Natural Reserve. Kendall-Frost has been the site of important research on wetland ecosystems and educational activities for almost 50 years. The potential habitat area also includes the 50-acre Campland site, which was identified as a wetlands restoration area by the City of San Diego in the Mission Bay Master Plan (see "Project History" section below). The 80-acre De Anza Point is also considered potential habitat area. De Anza Point was identified as a "special study area" by the Mission Bay Natural Resources Management Plan (1995). The City is currently in the process of relocating the residents of the De Anza Point RV Park, but this relocation process

is in litigation. Both De Anza Point and Campland are only open to residents or campers, guarded by gates and security guards, and are not readily open to the public. In addition to the potential habitat areas, the planning area also encompasses approximately 100 acres of active recreation area owned by the City, including a public golf course.

The planning area includes protected salt marsh habitat, as well as disturbed and urbanized areas. Portions of the planning area are included in the South Coast unit of the Natural Community Conservation Planning (NCCP) Multiple Species Conservation Plan for San Diego County and the San Diego Multiple Habitat Conservation Program (MHCP) plan. Mission Bay Park has been identified as a Globally Important Bird Area by Birdlife International and the National Audubon Society.

Project History: The proposed Plan would further the implementation or recommendations of the Mission Bay Park Master Plan (1978), the Mission Bay Natural Resources Plan (1990), the Mission Bay Master Plan Updates (1994 and subsequent), the USFWS's Light-footed Clapper Rail Recovery Plan (1985), and the Rose Creek Watershed Opportunities Assessment (2008). The need to develop a plan for restoration of the area around the mouth of Rose Creek was first identified 36 years ago in the Mission Bay Park Master Plan (1978). The 1978 Mission Bay Park Master Plan states that "consideration should be given to adding this area [Campland lease] to the Northern Wildlife Reserve upon termination of the lease [2017]." The Mission Bay Park Natural Resources Management Plan (1990) builds on the intentions of the original Master Plan and says, "From a resource management perspective, eastern and western expansion of the Northern Wildlife Preserve salt marsh has a high priority. Such expansion would broaden the base for all of Mission Bay Park's natural resources in the face of urban pressure and future threat of rising sea level." The Natural Resources Management Plan identified Campland as "possible salt marsh addition" (see Exhibit 3). The concept of marsh restoration was furthered in the Mission Bay Park Master Plan Update (2002). The Master Plan Update states: "An 80-acre saltwater marsh is proposed west of Rose Creek adjacent to the existing Northern Wildlife Preserve. This recommendation requires the relocation of the Recreational Vehicle Park (Campland on the Bay), possibly to the east side of the Creek as a potential use in the proposed De Anza Special Study Area" (see Exhibit 3). The Master Plan update also identified Campland as future "wetland habitat". Additional City planning included the Rose Creek Opportunities Assessment (2005), which was funded by the Conservancy in 2005. This Opportunities Assessment identified restoration of the wetlands at the mouth of Rose Creek as the top biological priority for the watershed. On October 21, 2008 the City approved the Opportunities Assessment as official City policy guidance for the restoration of Rose Creek.

PROJECT FINANCING

Coastal Conservancy	\$430,000
<u>U.S. Fish and Wildlife Service</u>	<u>\$25,000</u>
Project Total	\$455,000

The expected source of Conservancy funds for this project is an appropriation to the Conservancy from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84, Public Resources Code sections 75001et seq.). This funding source may be used for the protection of coastal watersheds in San Diego County. Proposition 84 allows for the utilization of funds for expenditures pursuant to Division 21 of the Public Resources Code, as specified in Section 75060(b), and for projects that protect San Diego Bay and adjacent watersheds, as specified in Section 75060(f). As specified in Section 75072.6, for purposes of Section 75060(f), "San Diego Bay and adjacent watersheds" includes the coastal and bay watersheds within San Diego County. Pursuant to Section 75060(b), funds may be allocated to the improvement and protection of coastal and marine water quality and habitats, so long as the project is compliant with Division 21 of the Public Resource Code.

The U.S. Fish and Wildlife Service will contribute money from their Coastal Program for a portion of the plan. Their contribution of \$25,000 represents 30% of the Coastal Program's annual budget, indicating the importance of this planning effort to their strategic goals.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed project would be undertaken pursuant to Chapter 6 of the Conservancy's enabling legislation, Public Resource Code Sections 31251-31270, and pursuant to Section 31111.

Consistent with Section 31251 of the Public Resources Code, the proposed project would award a grant to a nonprofit organization to undertake activities necessary for the enhancement of the natural and scenic character of Mission Bay, which has been impacted by indiscriminate dredging and filling, improper location of improvements, human-induced events, and incompatible land uses and has suffered the loss of natural and scenic values. This project will provide studies and plans necessary to restore and enhance the biological and hydrological resources of Mission Bay.

As required in Section 31252, the proposed project has been identified in the City of San Diego's Local Coastal Program as described in the "Consistency with Local Coastal Program Policies" section, below.

Section 31253 permits the Conservancy to provide up to the total cost of any coastal resource enhancement project, consistent with established project eligibility and priority factors. In determining the amount of Conservancy funding for this project, the factors identified in Section 31253 have been considered and applied, as described in detail below, under the heading "Consistency With Conservancy's Project Selection Criteria & Guidelines".

Section 31111 permits the Conservancy to award grants to nonprofit organizations for the purpose of funding and undertaking plans and feasibility studies.

CONSISTENCY WITH CONSERVANCY'S 2013 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 5, Objective A** of the Conservancy's 2013-2018 Strategic Plan, the proposed project will develop a plan for the restoration and enhancement of coastal habitats.

**CONSISTENCY WITH CONSERVANCY'S
PROJECT SELECTION CRITERIA & GUIDELINES:**

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on November 10, 2011, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Support of the public:** During his election campaign, the recently elected Mayor of the City of San Diego said, "In coming years, the City will use Mission Bay Initiative revenue to expand Mission Bay's wetlands, improve water quality, expand endangered species habitats, improve bicycle and pedestrian paths and restore parts of the seawall. Kevin [Faulconer] believes this is a prime example of what we can achieve when City Hall, businesses, and residents work in unison towards a common goal." The City will be an integral part of the wetland working group and/or technical advisory committee, which will lead the development of the Plan. City council members, State elected officials, community groups and scientists also support the project. See Exhibit 4 for evidence of support.

Although there is enthusiastic support for the project, there will also be those who are concerned about it. The Campland operators would like to stay on the site until their relocation to the nearby De Anza Point has been secured. Some nearby residents might be concerned about flooding issues connected with reconfiguring the hydrology of the area. And the residents of De Anza Point will be concerned about planning surrounding their community. The grantee will incorporate concerns such as these into the Plan through an extensive community outreach and engagement process where all concerned citizens will be invited to engage.

4. **Location:** The proposed project would be located within the coastal zone of the City of San Diego.
5. **Need:** The timing of this Plan is critical. The lease for the Campland property expires in 2017. Without a plan for the restoration of the site, it is possible that the City will extend Campland's lease and that the restoration project will become impossible for a long period of time. The Conservancy's funds will provide the initial investment that will enable future investments in engineering and construction.
6. **Greater-than-local interest:** Mission Bay Park encompasses about 4,200 acres and about 27 miles of shoreline and beaches. It is said to be the largest "aquatic park" of its kind in the country and it attracts millions of visitors each year. Restoring wetlands in Mission Bay would provide visitors with enhanced opportunities to experience the natural environment that once occurred throughout Mission Bay. In addition, the tidal wetlands of Southern California are part of a large mosaic that functions as an interconnected system. The

restoration of Mission Bay's wetlands will provide an expanded migratory bird stopover area, a source for seed and larvae, habitat for State and Federal threatened and endangered species, and improvements in water quality.

7. **Sea level rise vulnerability:** The planning area is located in an area that is vulnerable to future sea level rise. The conceptual plan will consider a range of sea level rise scenarios for the years 2050 and 2100 in order to assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea level rise. The restoration of wetlands in the planning area would provide wetland species with upland migration areas and could also reduce flooding impacts on surrounding infrastructure by buffering waves and tides.

Additional Criteria

8. **Urgency:** The timing of this Plan is critical. The lease for the Campland property expires in 2017. Without a plan for the restoration of the site, it is possible that the City will extend Campland's lease and that the restoration project will become impossible for a long period of time.
9. **Resolution of more than one issue:** The Plan would help resolve multiple issues such as habitat availability, endangered species management, water quality and sea level rise. In addition, it would also help resolve remaining land-use issues within the planning area regarding recreation and visitor-serving amenities.
10. **Leverage:** See the "Project Financing" section above.
11. **Conflict resolution:** There is currently a conflict between Campland, De Anza Point, the City of San Diego, and the environmental community over how the land in the planning area should be used. The proposed Plan would present feasible options for restoration of some parts of the planning area so that discussions could proceed about where recreation and visitor-serving amenities should be placed within the area.
13. **Readiness:** The grantee and its partners are ready to start the project immediately.
14. **Realization of prior Conservancy goals:** See "Project History" above. In addition, the proposed Plan was added to the Work Plan for the Southern California Wetlands Recovery Project (WRP) in 2013, which is a prioritized list of projects for Southern California that has been vetted by the 18 member agencies of the WRP.
18. **Minimization of greenhouse gas emissions:** The project design will include measures to avoid or minimize greenhouse gas emissions to the extent feasible and consistent with the project objectives.

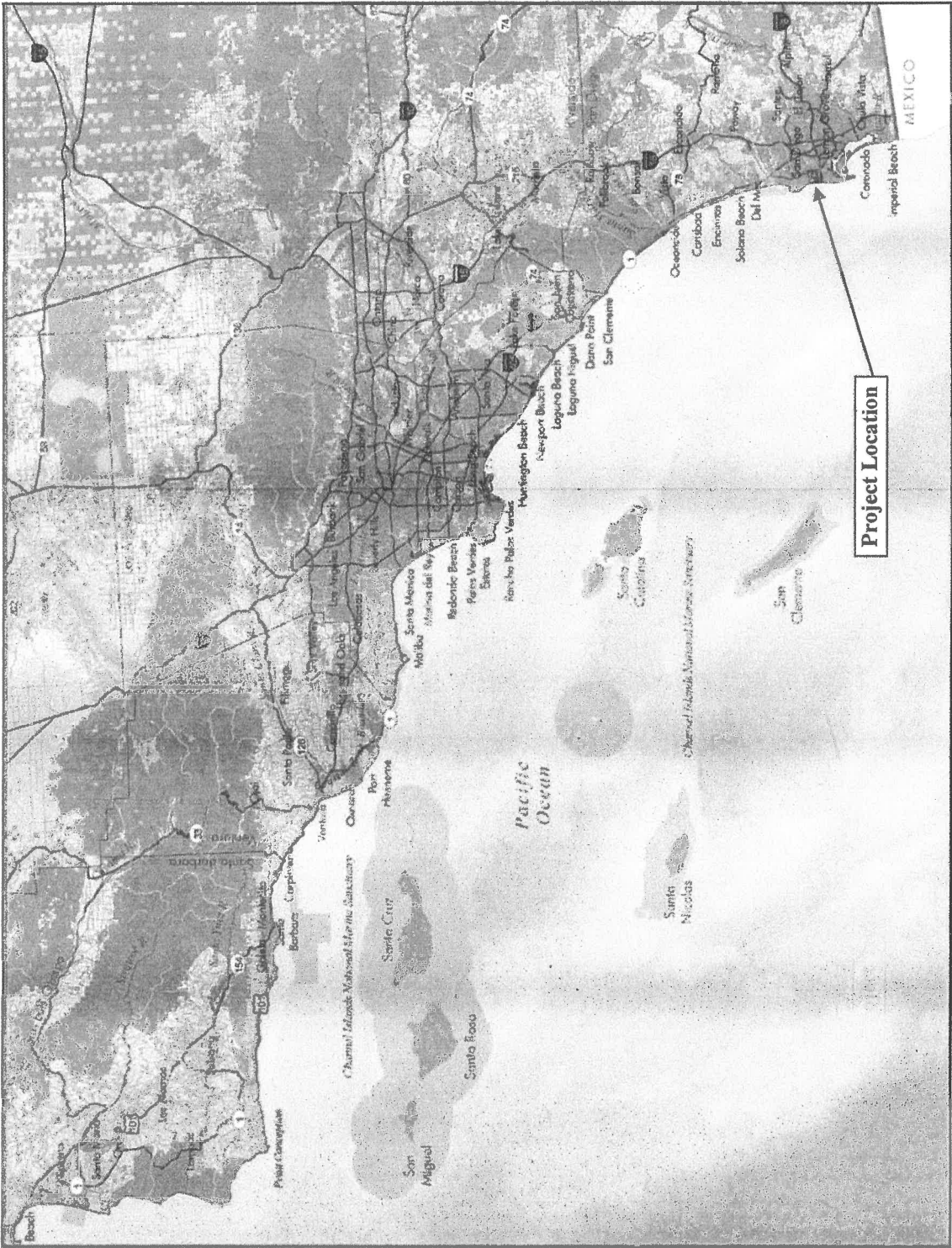
CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The Mission Bay Park Master Plan Update (1994, as amended) serves as the City of San Diego's Local Coastal Program (LCP) for the area the proposed planning area. The proposed Plan is consistent with the recommendations of this LCP. See "Project History" above for more information on the consistency of the proposed Plan with the Mission Bay Park Master Plan Update.

COMPLIANCE WITH CEQA:

The proposed project is statutorily exempt from the provisions of CEQA under 14 California Code of Regulations, Section 15262 exempting feasibility studies for possible future actions that the Conservancy has not approved, adopted or funded and which do not require preparation of an EIR or negative declaration. Staff will file a Notice of Exemption upon approval of the proposed authorization.

Exhibit 1: Project Location and Site Maps





U.S. Fish & Wildlife Service
Carlsbad Fish and Wildlife Office
2177 Salk Ave, Suite 250, Carlsbad, California 92008

Exhibit 1. Project Location and Site Maps

Mission Bay Wetlands Initiative



Figure 2. Planning area for Mission Bay Wetlands Conceptual Restoration Plan.

Produced by: GIS Services
Carlsbad Fish & Wildlife Office
GIS CONTACT: Tony McKinney
BIOLOGY CONTACT: Carolyn Lieberman
Map Date: 27 March, 2014
Data Source: San Francisco Estuary Institute
IMAGE SOURCE: USDA NADP 2012
A:\mfc\Carlyn\UN_Mission_Bay\Miss_Bay_Project.mxd



U.S. Fish & Wildlife Service
Carlsbad Fish and Wildlife Office
2177 Salt Ave, Suite 250, Carlsbad, California 92008

Exhibit 1. Project Location and Site Maps

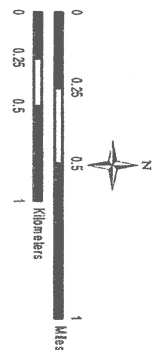
Project Setting in Mission Bay, San Diego, CA



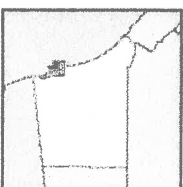
Figure 3. Context of planning area within Mission Bay.

Produced by: GIS Services
Carlsbad Fish & Wildlife Office
GIS CONTRACT: Tony McKinney
BIOLOGY CONTRACT: Carolyn Lieberman

Map Date: 27 March, 2014
Data Source: San Francisco Estuary Institute
IMAGE SOURCE: USDA NAIP 2012
Asset/CartId/UN_Mission_Bay/Miles_Bay_all_Threat_Setting.mxd



 Project Area
 Initiative Areas





U.S. Fish & Wildlife Service
Carlsbad Fish and Wildlife Office
2177 Salik Ave, Suite 250, Carlsbad, California 92008

Exhibit 1. Project Location and Site Maps

T-Sheet Historical Habitat in Mission Bay, San Diego, CA

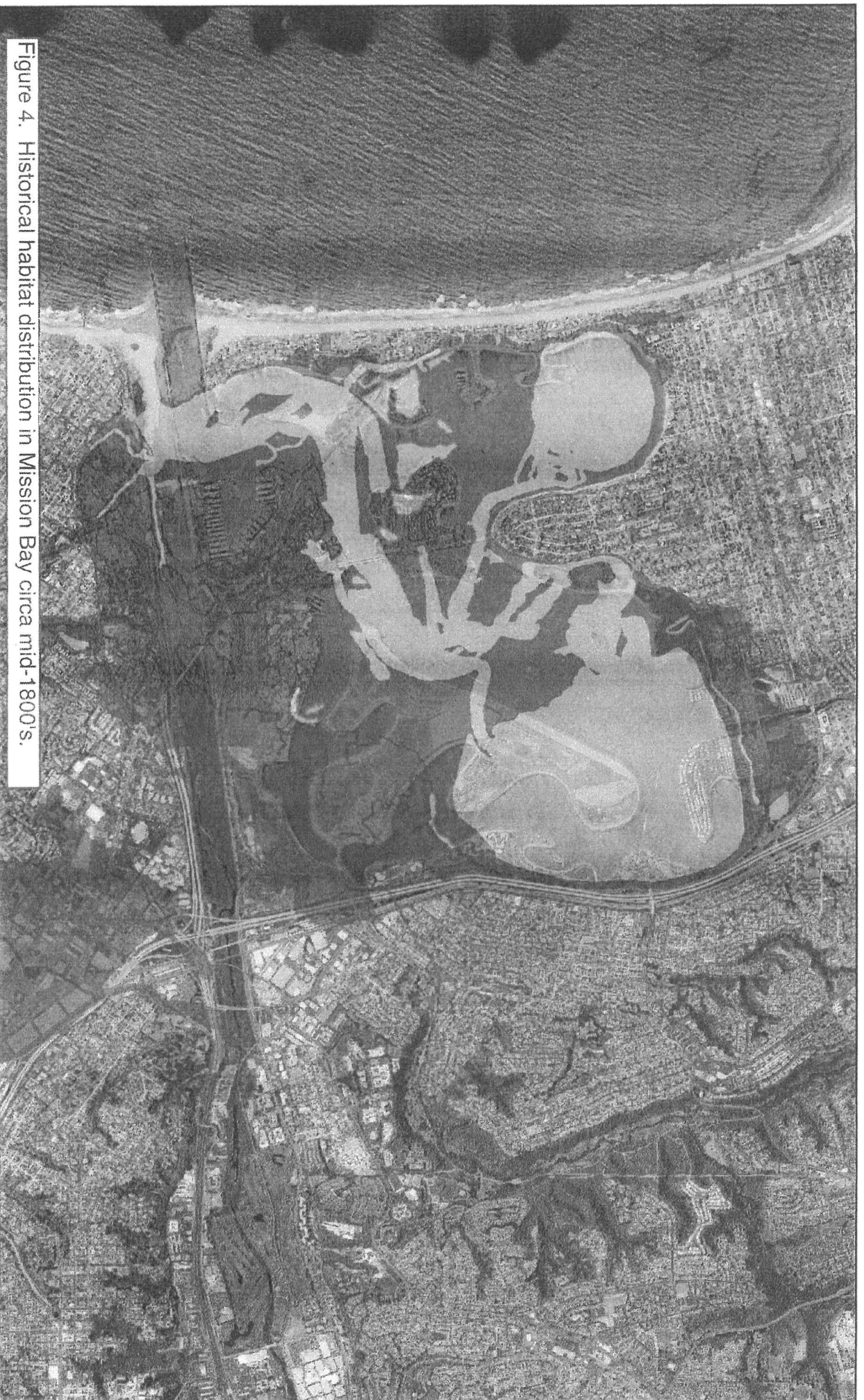


Figure 4. Historical habitat distribution in Mission Bay circa mid-1800's.

Produced by: GIS Services
Carlsbad Fish & Wildlife Office
GIS CONTACT: Tony McManey
BIOLOGY CONTACT: Carolyn Lieberman
Map Date: 27 March, 2014
Data Source: San Francisco Estuary Institute
IMAGE SOURCE: USDA NAE 2012
A:\m\Carlsbad\UN_Mission_Bay\Miss_Bay_all_TSheet.mxd

T-Sheet Historical Habitat

- Bluff
- Channel
- Subtidal Water
- Emergent Marsh, High Elevation
- Emergent Marsh, Low Elevation
- Intertidal Flat

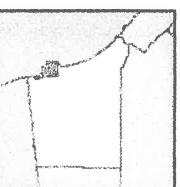


Exhibit 2: Site Photos



Figure 1. Aerial photo of Kendall-Frost marsh showing surrounding housing, roads and Campland by the Bay.

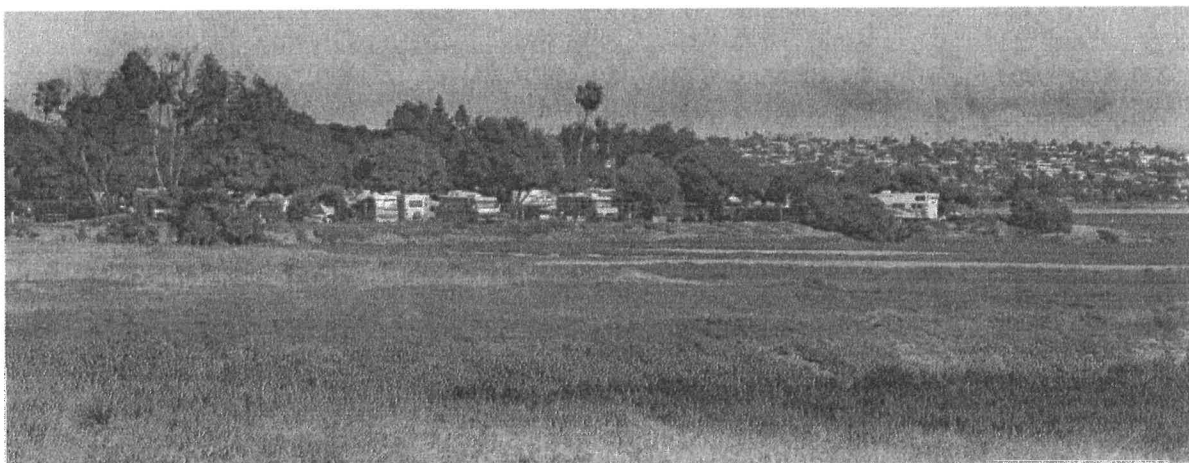


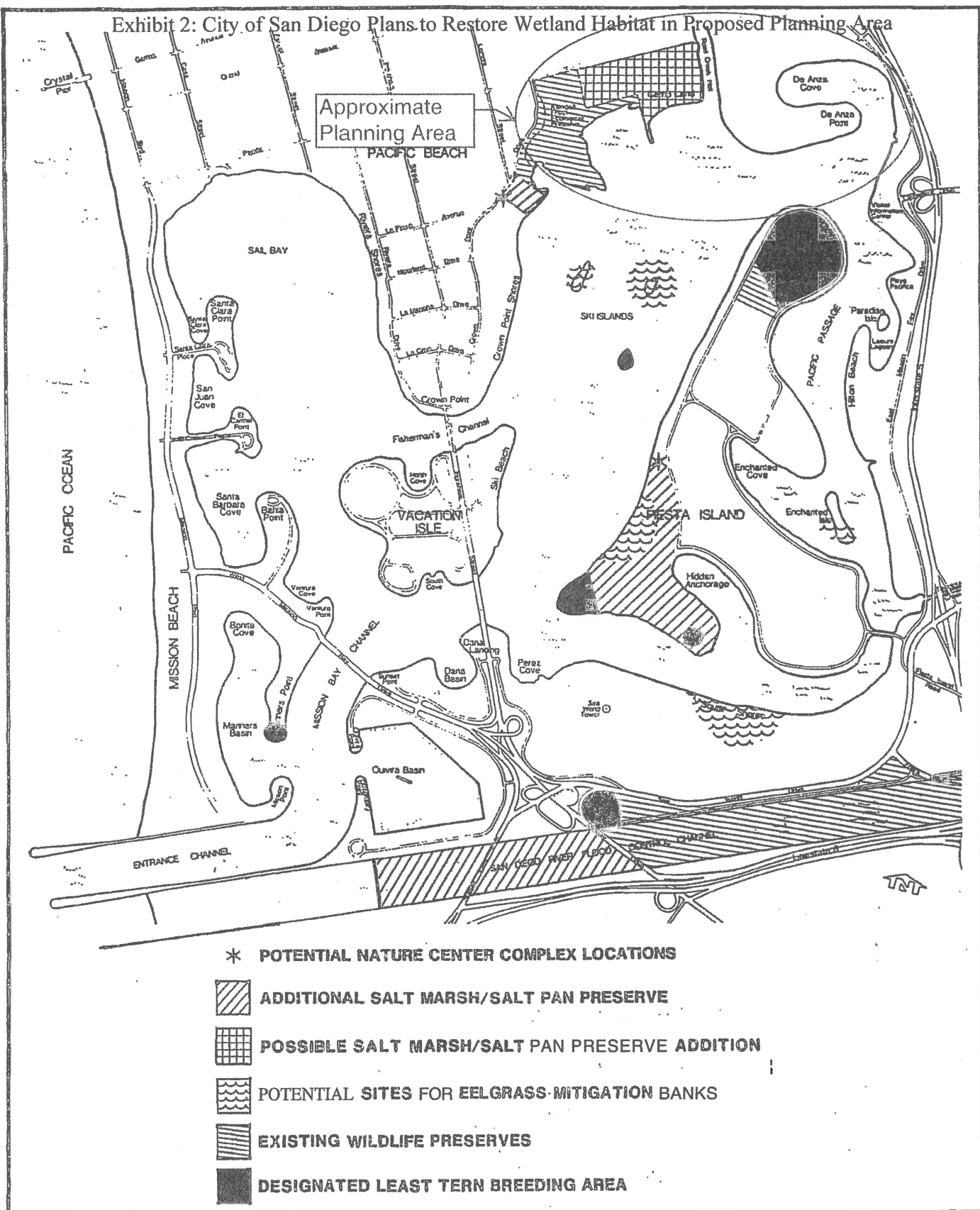
Figure 2. Kendall-Frost marsh with Campland by the Bay in the background.

Exhibit 2: Site Photos



Figure 3. Tidal channels at Kendall-Frost marsh provide habitat for endangered birds and other wildlife.

Exhibit 2: City of San Diego Plans to Restore Wetland Habitat in Proposed Planning Area



PROPOSED WILDLIFE PRESERVE ADDITIONS

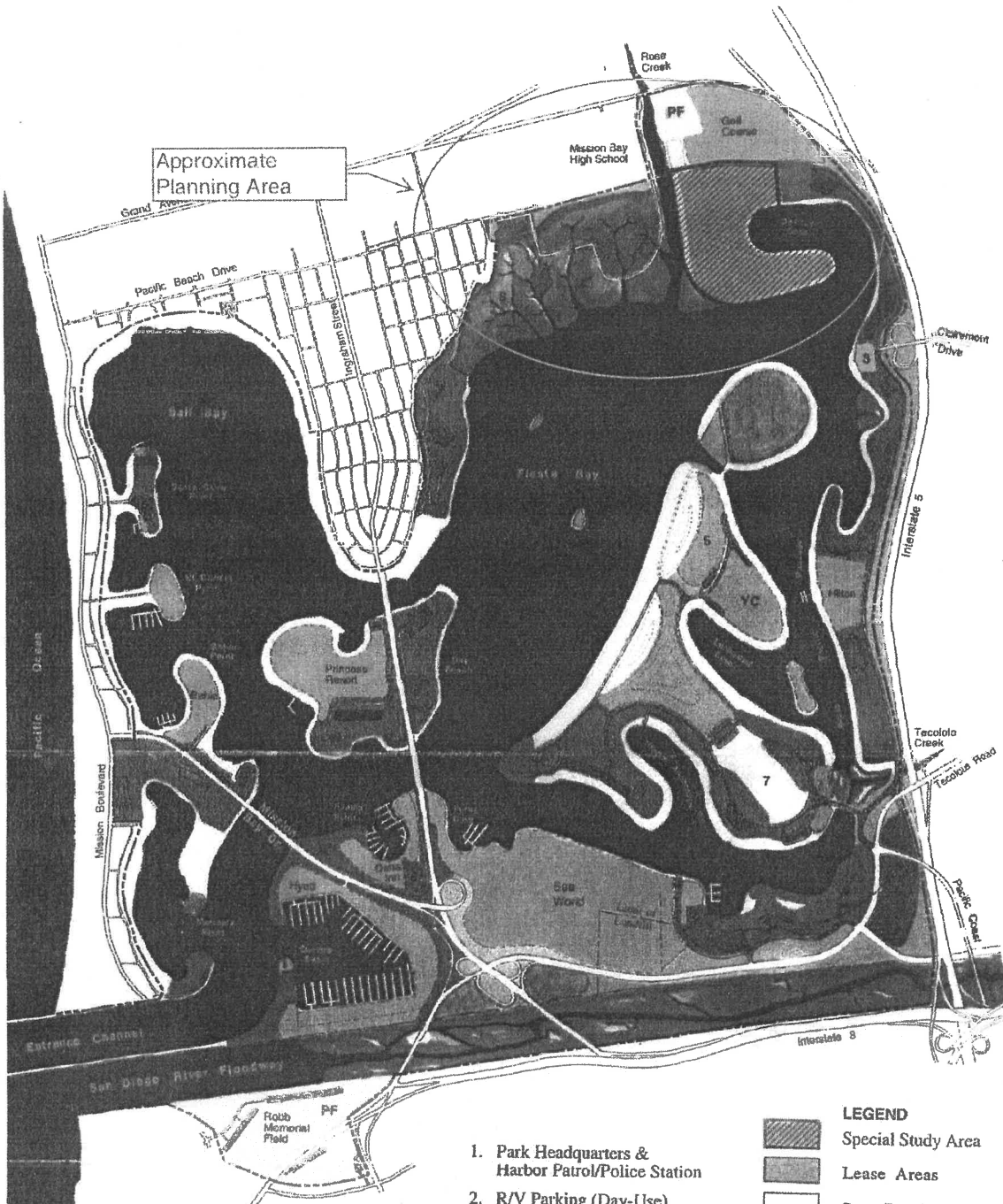
Environmental Quality Division

CITY OF SAN DIEGO • PLANNING DEPARTMENT

Mission Bay Park Natural Resources Management Plan, 1990

FIGURE

5



Mission Bay Park San Diego, California

NORTH 0 500 1000 2000 FT.

Land Use

1. Park Headquarters & Harbor Patrol/Police Station
2. R/V Parking (Day-Use)
3. Visitor/Information Center
4. Overflow Parking
5. Primitive Camping
6. Boat Ramp/Trailer Parking
7. Sand Arena
8. Northern Wildlife Preserve
9. Public Amphitheater & Promenade

LEGEND	
	Special Study Area
	Lease Areas
	Open Beach
	Parkland
	Playfields
	Youth Camping
	Wetland Habitat
	Upland Preserve
	Coastal Landscape
	Salt Pan

Mission Bay Park Master Plan Update.
1994 as amended



KEVIN L. FAULCONER

MAYOR

April 15, 2014

Mr. Douglas Bosco, Chairman
State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612

RE: Letter of Support for the Mission Bay Wetland Restoration Feasibility Study

Dear Mr. Bosco:

I am writing in support of the San Diego Audubon Society's (SDAS) effort to protect and restore critical wetland habitat in Mission Bay, San Diego, and recommend that the State Coastal Conservancy support SDAS's application to fund the Mission Bay Wetland Restoration Feasibility Study.

As a former chair of the Mission Bay Park Committee and councilmember for District 2 where this project is located, the restoration of wetland habitat in the northeast corner of Mission Bay will improve water quality and is a key environmental priority for my administration. When this project is funded, I am committed to assigning City of San Diego staff from relevant City departments to participate in this planning effort as appropriate. The project is consistent with the Mission Bay Park Master Plan Update and the Mission Bay Park Natural Resource Management Plan.

Wetland restoration is vital for the protection of Mission Bay's natural resources, including several threatened and endangered species and providing a buffer against rising sea levels. This project will develop approaches to protect, improve, or create 140 acres of tidal marsh habitat as well as 30 acres of transitional/upland habitat to allow for improved ecosystem connections. Enhanced public access for research, education, and recreation is another significant focus of the planning effort.

Such action is needed because development and large-scale alteration of Mission Bay has resulted in the loss of over 92% of this former estuarine complex's wetland habitat, including the destruction of habitat for the Light-footed Clapper Rail (federally listed endangered), and Belding's Savannah Sparrow (state listed) and a significant reduction of important ecosystem functions. Commitments for wetland restoration in the project area have been in place for almost 20 years, starting with the Mission Bay Master Plan (1996).

Mr. Douglas Bosco
April 15, 2014
Page 2

This project will convene cross-industry stakeholders, including members of the public, state and federal wildlife agencies, City of San Diego, University of California, San Diego Association of Governments, and many local nonprofit organizations, in seizing one of the last opportunities for large-scale wetland restoration in Southern California.

I appreciate your strong consideration in support of SDAS's application to fund the Mission Bay Restoration Feasibility Study.

Sincerely,

A handwritten signature in dark ink, appearing to read "Kevin L. Faulconer", with a long, sweeping horizontal line extending to the right.

Kevin L. Faulconer
Mayor

cc: Chris Redfern, Executive Director, San Diego Audubon Society

STATE CAPITOL, ROOM 4090
SACRAMENTO, CA 95814
TEL (916) 651-4039
FAX (916) 651-4939

DISTRICT OFFICE
701 B STREET, SUITE 1840
SAN DIEGO, CA 92101
TEL (619) 645-3133
FAX (619) 645-3144

WEBSITE
HTTP://SD39.SENATE.CA.GOV

California Legislature



MARTY BLOCK

SENATOR, THIRTY-NINTH DISTRICT

COMMITTEES
CHAIR, BUDGET & FISCAL
REVIEW SUBCOMMITTEE
#1 ON EDUCATION
BUDGET & FISCAL REVIEW
BUSINESS, PROFESSIONS
& ECONOMIC DEVELOPMENT
EDUCATION
PUBLIC EMPLOYMENT
& RETIREMENT
PUBLIC SAFETY
VETERANS AFFAIRS

April 11, 2014

Mr. Douglas Bosco, Chairman
State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612

Dear Chairman Bosco and Board Members of the State Coastal Conservancy:

I am writing in support of the San Diego Audubon Society's (SDAS) effort to protect and restore critical wetland habitat in Mission Bay, San Diego, and recommend that the State Coastal Conservancy support SDAS's application to fund the Mission Bay Wetland Restoration Feasibility Study.

Wetland restoration is vital for the protection of Mission Bay's natural resources, including several threatened and endangered species, as well as providing a buffer against rising sea levels. This project will develop approaches to protect, improve, or create 140 acres of tidal marsh habitat, as well as 30 acres of transitional/upland habitat to allow for improved ecosystem connections. Enhanced public access for research, education, and recreation will be another significant focus of the planning effort.

Such action is needed because development and large-scale alteration of Mission Bay has resulted in the loss of over 92% of this former estuarine complex's wetland habitat, including the destruction of habitat for the Light-footed Clapper Rail (federally-listed endangered) and Belding's Savannah Sparrow (state-listed) and a significant reduction of important ecosystem functions. Commitments for wetland restoration in the project area have been in place for almost 20 years, starting with the Mission Bay Master Plan (1996).

This project will convene cross-industry stakeholders, including members of the public, state and federal wildlife agencies, City of San Diego, University of California, San Diego Association of Governments (SANDAG), and many local non-profits, in seizing one of the last opportunities for large-scale wetland restoration in Southern California.

Sincerely,

Senator Marty Block
39th District

CC: Chris Redfern, Executive Director, San Diego Audubon Society

STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0078
(916) 319-2078
FAX (916) 319-2178

DISTRICT OFFICE
2445 FIFTH AVENUE, SUITE 401
SAN DIEGO, CA 92101
(619) 645-3090
FAX (619) 645-3094

E-MAIL
assemblymember.atkins@assembly.ca.gov

Assembly California Legislature



TONI ATKINS

ASSEMBLYMEMBER, SEVENTY-EIGHTH DISTRICT
MAJORITY LEADER

COMMITTEES
AGRICULTURE
HEALTH
HOUSING AND COMMUNITY
DEVELOPMENT
VETERANS AFFAIRS

JOINT COMMITTEES
JOINT LEGISLATIVE AUDIT

April 4, 2014

Mr. Douglas Bosco, Chairman
State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612

Dear Chairman Bosco and Members of the State Coastal Conservancy,

RE: Letter of Support for the Mission Bay Wetlands Restoration Feasibility Study

I write in support of the San Diego Audubon Society's (SDAS) effort to protect and restore critical wetlands habitat in Mission Bay, San Diego, and request that the State Coastal Conservancy support SDAS's application to fund the Mission Bay Wetlands Restoration Feasibility Study.

Wetlands restoration is vital for the protection of Mission Bay's natural resources, including several threatened and endangered species, as well as providing a buffer against rising sea levels. This project will develop approaches to protect, improve, or create 140 acres of tidal marsh habitat, as well as 30 acres of transitional/upland habitat to allow for improved ecosystem connections.

Enhanced public access to the area for research, education and recreation is another significant focus of the planning effort. Development and large-scale alteration of Mission Bay over the decades has resulted in the loss of over 92% of this former estuarine complex's wetlands habitat, including the destruction of habitat for the federally-listed endangered Light-footed Clapper Rail and the state-listed Belding's Savannah Sparrow, plus a significant reduction of important ecosystem functions.

Commitments for wetlands restoration in the project area have been in place for almost 20 years, starting with the Mission Bay Master Plan adopted in 1994 by the San Diego City Council and updated in 2002, and the Mission Bay Park Natural Resources Management Plan adopted in 1990.

I was a member of the San Diego City Council when the Mission Bay Master Plan was updated in 2002, and am familiar with this important area of Mission Bay.

This project will convene cross-industry stakeholders, including members of the public, state and federal wildlife agencies, City of San Diego, University of California at San Diego, San Diego Association of Governments (SANDAG), and many local non-profits, in seizing one of the last opportunities for large-scale wetland restoration in Southern California.

There is local support for preserving and enhancing natural resources in Mission Bay. I urge the Coastal Conservancy to support the Mission Bay Wetlands Restoration Feasibility Study.

Warmly,

A handwritten signature in cursive script that reads "Toni Atkins".

TONI ATKINS
Speaker-Elect
78th Assembly District

TA:ds



COUNCILMEMBER LORIE ZAPF

SIXTH DISTRICT
CITY OF SAN DIEGO

April 25, 2014

Mr. Douglas Bosco, Chairman
State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612

RE: Letter of Support for the Mission Bay Wetland Restoration Feasibility Study

Dear Mr. Bosco:

As Chair of the City of San Diego's Smart Growth and Land Use Committee, Vice-Chair of the City of San Diego's Environment Committee and as a member of the San Diego River Conservancy Governing Board, I fully support the efforts of the San Diego Audubon Society to protect, restore, and conserve our most precious marshland habitats in Mission Bay through the application of grant funds for the Mission Bay Wetland Restoration Feasibility Study.

For almost 20 years, the City of San Diego has been committed to this vision through the update and implementation of the Mission Bay Park Master Plan (1996). Having represented Mission Bay in the past, I understand the project area and the need for comprehensive restoration. This area, including the Kendall-Frost Reserve, is made up of mudflats, eelgrass beds, coastal sage scrub, tidal channels, and south coastal salt marsh- all of which need to be protected. This feasibility study will begin that important process.

This area is also home to the Light-footed Clapper Rail (federally-listed endangered) and the Belding's Savannah Sparrow (state-listed endangered) and both have seen Mission Bay lose over 92% of its wetland habitat. Using the proposed feasibility study, this project will enhance over 140 acres of tidal marshlands and create 30 acres of transitional/upland habitat connecting several ecosystems.

I am confident that with this grant money the San Diego Audubon Society will work effectively with numerous stakeholders and wildlife agencies including the City of San Diego, the San Diego Association of Governments (SANDAG), and one of our premier universities, University of California San Diego to ensure the survival of this precious wetland. I urge you to support them in this utmost important endeavor.

Sincerely,

Lorie Zapf
District 6 Council Member
City of San Diego

CC: Chris Redfern, Executive Director, San Diego Audubon Society





COUNCILMEMBER ED HARRIS

SECOND DISTRICT
CITY OF SAN DIEGO

April 29, 2014

Mr. Douglas Bosco, Chairman
State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612

Dear Chairman Bosco and Board Members of the State Coastal Conservancy,

RE: Letter of Support for the Mission Bay Wetland Restoration Feasibility Study

As the Councilmember representing Mission Bay and the surrounding communities, I am writing in support of the San Diego Audubon Society's (SDAS) effort to protect and restore critical wetland habitat in this area. I highly recommend that the State Coastal Conservancy support SDAS's application to fund the Mission Bay Wetland Restoration Feasibility Study.

Wetland restoration is vital for the protection of Mission Bay's natural resources, including several threatened and endangered species, as well as providing a buffer against rising sea levels. This project will develop approaches to protect, improve, or create 140 acres of tidal marsh habitat, as well as 30 acres of transitional/upland habitat to allow for improved ecosystem connections.

Such action is needed because development and large-scale alteration of Mission Bay has resulted in the loss of over 92% of this former estuarine complex's wetland habitat, including the destruction of habitat for the Light-footed Clapper Rail (federally-listed endangered) and Belding's Savannah Sparrow (state-listed) and a significant reduction of important ecosystem functions. Commitments for wetland restoration in the project area have been in place for almost 20 years, starting with the Mission Bay Master Plan (1996).

This project will convene cross-industry stakeholders, including members of the public, state and federal wildlife agencies, City of San Diego, University of California, San Diego Association of Governments (SANDAG), and many local non-profits, in seizing one of the last opportunities for large-scale wetland restoration in Southern California.

Sincerely,

A handwritten signature in dark ink, appearing to read "Ed Harris".

Ed Harris
District 2 Councilmember





NATURAL RESERVE SYSTEM
9500 GILMAN DRIVE
LA JOLLA, CALIFORNIA 92093-0208

TELEPHONE: (858) 534-3579
e-mail: llevin@ucsd.edu
<http://nrs.ucsd.edu/kendall>

April 30, 2014

Mr. Douglas Bosco, Chairman
State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612

RE: Letter of Support for the Mission Bay Wetland Restoration Feasibility Study

Dear Chairman Bosco and Board Members of the State Coastal Conservancy,
I am writing to recommend that the State Coastal Conservancy fund the San Diego Audubon Society's (SDAS) Mission Bay Wetland Restoration Feasibility Study that includes the University of California's property within the Kendall-Frost Marsh Reserve.

Wetland restoration is critical for the protection of Mission Bay's natural resources, including several threatened and endangered species, as well as providing areas for marsh migration with rising sea levels. This project will develop approaches to protect, improve, or create 140 acres of tidal marsh habitat, as well as 30 acres of transitional/upland habitat to allow for improved ecosystem connections. Enhanced public access for research, education, and recreation will be another significant focus of the planning effort.

Such action is needed because development and large-scale alteration of Mission Bay has resulted in the loss of over 92% of this former estuarine complex's wetland habitat, including the destruction of habitat for the Light-footed Clapper Rail (federally-listed endangered) and Belding's Savannah Sparrow (state-listed) and a significant reduction of important ecosystem functions. Commitments for wetland restoration in the project area have been in place for almost 20 years, starting with the city of San Diego's Mission Bay Master Plan (1996).

This project will convene cross-industry stakeholders, including members of the public, state and federal wildlife agencies, City of San Diego, University of California, San Diego Association of Governments (SANDAG), and many local non-profits, in seizing one of the last opportunities for large-scale wetland restoration in Southern California.

Sincerely,

Lisa A. Levin

Lisa A. Levin, Professor, SIO, and Faculty advisor, KF Marsh Reserve

cc: Chris Redfern, Executive Director, San Diego Audubon Society

April 28, 2014

Mr. Douglas Bosco, Chairman

State Coastal Conservancy

1330 Broadway, 13th Floor

Oakland, CA 94612

Dear Chairman Bosco and Board Members of the State Coastal Conservancy,

RE: Letter of Support for the Mission Bay Wetland Restoration Feasibility Study

On behalf of the Friends of Mission Bay Marshes I wish to state our enthusiastic support for the WRP proposal you are heading to study the eastward expansion of the Kendall-Frost/Northern Wildlife Preserve

Our organization is a small informal one, made up of local residents interested in the K-F/NW marsh. Our main aim is to keep the marsh viable by and educating ourselves and the public about the importance of the marsh for the local ecology. In practice we do this by assisting UCSD in marsh activities and disseminating information locally. We are advocates of expanding the marsh to re-incorporate Rose Creek, to make the marsh more sustainable and in the long-term to ensure the marsh's future as sea level rises.

Your proposal fits very well into the overall WRP strategy and the City of San Diego's Mission Bay Improvements. The Campland lease expiration and the De Anza Cove expected availability makes this a unique opportunity to provide more wetlands in Mission Bay.

We will participate in your proposal and subsequent activities as best we can.

Yours sincerely,



Roy Little.

4003 Crown Point Drive, V22,

San Diego, CA 92019

Cc:Chris Redfern, Executive Director, San Diego Audubon Society.

April 24, 2014

Mr. Douglas Bosco, Chairman
State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612

Dear Chairman Bosco and Board Members of the State Coastal Conservancy,

RE: Letter of Support for the Mission Bay Wetland Restoration Feasibility Study

The Rose Creek Watershed Alliance is a group of organizations formed to help plan the future of the Rose Creek Watershed, which drains a 23,427-acre area of San Diego County into Mission Bay. We are writing in support of the San Diego Audubon Society's (SDAS) effort to protect and restore critical wetland habitat in Mission Bay, San Diego, and recommend that the State Coastal Conservancy support SDAS's application to fund the Mission Bay Wetland Restoration Feasibility Study.

The Alliance was established in 2005 to help create a plan to improve the watershed, and after almost five years of consideration and public input, the San Diego City Council accepted the Rose Creek Watershed Opportunities Assessment on October 21, 2008. The 16-member Alliance (including the Mission Bay Park Committee, Friends of Rose Creek, and the Pacific Beach Planning Group) has been working together since then to help implement its recommendations.

The Feasibility Study proposed by SDAS is not only consistent with this plan, but directly implements recommendations included in it. Specifically, the plan calls for action to "enhance the biological connection of the Rose Creek Watershed [RCW] to Mission Bay... restore and enhance native habitats within the RCW... assess potential for habitat enhancements for the light-footed Clapper Rail...[and] expand wetland and riparian habitats where feasible."

Wetland restoration is vital for the protection of Mission Bay's natural resources, including several threatened and endangered species, as well as providing a buffer against rising sea levels. This project will develop approaches to protect, improve, or create 140 acres of tidal marsh habitat, as well as 30 acres of transitional/upland habitat to allow for improved ecosystem connections. Enhanced public access for research, education, and recreation will be another significant focus of the planning effort.

Such action is needed because development and large-scale alteration of Mission Bay has resulted in the loss of over 92% of this former estuarine complex's wetland habitat, including the destruction of habitat for the Light-footed Clapper Rail (federally-listed endangered) and Belding's Savannah Sparrow (state-listed) and a significant reduction of important ecosystem functions. Commitments for wetland restoration in the project area have been in place for almost 20 years, starting with the Mission Bay Master Plan (1996).

This project will convene cross-industry stakeholders, including members of the public, state and federal wildlife agencies, City of San Diego, University of California, San Diego Association of Governments (SANDAG), and many local non-profits, in seizing one of the last opportunities for large-scale wetland restoration in Southern California.

Sincerely,

Ann Van Leer

Ann Van Leer
Rose Creek Watershed Alliance
ann@landconserve.com
858-442-0937

CC: Chris Redfern, Executive Director, San Diego Audubon Society

Rose Creek Watershed Alliance



2400 Historic Decatur Rd. 107-626 San Diego,
CA 92106

www.rosecreekwatershed.org